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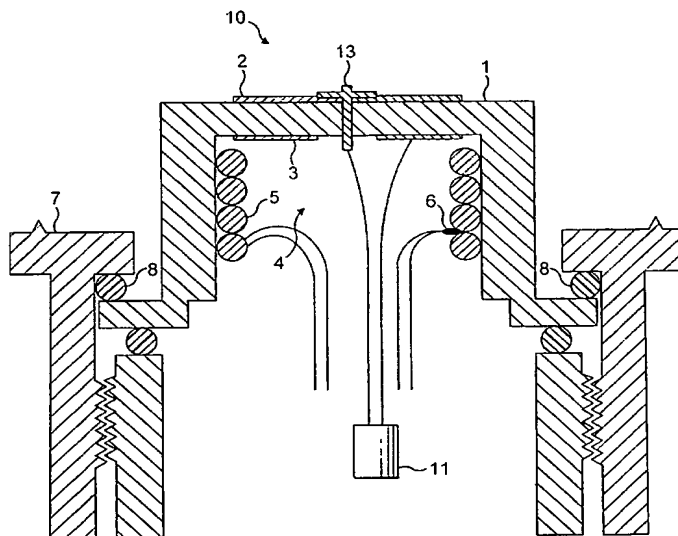
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(54) Title: ELECTROCHEMICAL SOLID ELECTROLYTE SENSOR FOR THE DETECTION OF OXYGEN, HYDROCAR-
BONS AND MOISTURE IN VACUUM ENVIRONMENTS



(57) Abstract: A contaminant molecule sensor for the detection of oxygen, hydrocarbons and humidity comprises an electrochemical cell for use in vacuum. The cell comprises a measurement electrode (2), a reference electrode (3) and a solid-state ionic species conductor (1) bridging the measurement electrode and the reference electrode. The measurement electrode comprises a catalyst selected for its ability to catalyse the dissociation of a contaminant molecule into its ionic species. The reference electrode comprises a catalyst selected for its ability to catalyse the dissociation of a reference molecule into its ionic species. The conductor is selected to conduct an ionic species common to the dissociated contaminant and reference molecules.



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